



city of san luis obispo

919 Palm Street; San Luis Obispo, CA 93401

ADDENDUM

DATE:	August 3, 2017	
PROJECT:	Membrane Equipment System	SPECIFICATION NO. 91539A
ADDENDUM NO.:	3	
BID DATE:	August 22, 2017	

NOTICE TO ALL CONTRACTORS SUBMITTING PROPOSALS:

You are hereby notified of the following changes, clarifications or modifications to the Request for Proposal. This addendum shall supersede the original Request for Proposal. Wherein this addendum contradicts the original Request for Proposal, this addendum shall take precedence. All other conditions shall remain unchanged. The change specified below shall become a legal part of the Request for Proposal.

A. CHANGES AND/OR CLARIFICATIONS TO THE Request For Proposal as attached and below.

- Question:** The Life Cycle period is only for 10 years. We recommend a 25-year life cycle evaluation as most facilities run at least that long without a major overhaul with the membranes being the main item that is changed/replaced during that time. This would capture the actual cost to the City of operating the facility including membrane replacement(s) during that time. We recommend that the City budget for membrane replacements throughout the anticipated life of the facility and consider these actual costs in their NPV analysis. Since the vendors have provided a replacement cost per module and the number of modules is known, a reasonable replacement cost estimate can be calculated. Furthermore, since each unique membrane product's life can be projected, such as via the suggestion below in Question #2, each membrane manufacturer's replacement interval could be used to calculate the interval used in the life cycle evaluation. Lastly, the chemicals and power should also be considered in the 25-year life cycle.

Response: There is no change to the Request for Proposals.

- Question:** There is an obvious benefit and life cycle advantage to the owner who installs membranes that last longer between replacements. Each membrane manufacturer's installation base and field track record can be used to anticipate projected life of their membranes. We recommend that The City determine anticipated membrane replacement interval as follows: For the purposes of determining true life cycle cost to the Owner, the City staff and the Owner's agents will determine the assigned replacement interval for each bidder. The determination of this interval will be based solely on an investigation conducted by the owner's agents. The Owner's agents will solicit facilities in operation to determine the

average replacement interval in an MBR application. Based on the responses of the solicitation a unique replacement interval for membranes will be assigned to each vendor. Additionally, a fixed cost in addition to any costs associated with the replacement membranes (i.e. purchase of new membranes at full cost, purchase of new membranes at a pro-rated cost, or procurement of membranes at no cost) will be assigned. This cost is to accurately represent the true costs to the City during a replacement and will cover items such as but not limited to, time spend by City staff in diagnosing problems to justify membrane replacement, cost of indirect labor in procuring replacement membranes, offloading and handling of crates, taxes and duties, labor associated with replacement, laboratory procedures, and reporting to regulators. The cost assigned will be determined by the City staff and its agents. The assigned cost will be the same for all vendors.

- Example: Vendor A = 7yr replacement interval, Vendor B = 11 yrs.
- \$250k of associated City costs every X years is assigned to each vendor's bid.

Response: There is no change to the Request for Proposals.

3. **Question:** We recommend that the cost of spare parts be annualized then factored into the life cycle calculations over the total plant life.

Response: There is no change to the Request for Proposals.

4. **Question:** American Iron & Steel (AIS) Requirements. Our intent with this RFI is to ensure both proponents are supplying goods which meet the requirements of the specifications and appreciate any clarity which is provided. In the EPA's guidance on AIS, membrane bioreactor systems are not covered by the AIS requirements. Based on our delivery of other MBR jobs across the US we have experienced that the definition of a MBR system does not include every component contained within the scope of supply requested in the RFP. Based on our review of the RFP, interpretation of the EPA guidance, and experience on other projects we present the following points 'a' through 'd' for your review and comment:

- a) The membrane modules themselves are not impacted by AIS as they are covered by the definition of MBR system.
- b) Valves used outside the membrane cells, these include the butterfly, gate, ball, and other metal body valves are covered by the AIS requirements. We are not aware of any national or project specific waiver for these valves and understand that these valves are NOT part of the definition of MBR system in the EPA guidance. In the event the lead time or costs of these items triggers the criteria to apply for a waiver, the selected proponent shall work in conjunction with the City to seek a waiver during the final design phase of the project. Please confirm our understanding is the intent of the City for this RFP.
- c) We understand the headers which run above the membrane cells/tanks are covered by the 'construction materials' description in the AIS and not included in the MBR system definition. We have included images of these headers in question on the next page, the image is representative of the type of system Evoqua and the other proponent who attended the pre-proposal meeting would supply:

Please confirm our interpretation that these headers are covered by the AIS definition of construction materials in the EPA guidance. We have found no nationwide or project specific waiver which has been granted on this project.

- d) We have concluded the steel bracketing used to suspend the membrane racks is covered by the AIS definition of construction material as well. Any steel integral to the core membrane module itself is not considered a construction material per the EPA's guidance, please confirm that this is in fact the City's understanding of the AIS.

Response: Refer to SRF Funding Requirements. There is no change to the Request for Proposals.

5. **Question:** 00 41 63 - 7 (Membrane Bioreactor) – Please clarify that a California Contractor's License is required of the MBR system supplier.

Response: Addressed in the attached, "Addendum No. 3 to the Contract Documents for the procurement of the Membrane Equipment System for the San Luis Obispo Water Resource Recovery Facility, dated August 3, 2017."

6. **Question:** Schedule K, part 3 does not provide any meaningful, legally defensible information that can be used in the bid evaluation process as how the information is being used is not outlined. Secondly, the duration of warranty at some facilities may be short and if the membranes were replaced in years beyond the warranty it would not be listed here which seems to undermine the intention (i.e. a facility that has a 2-year warranty and the membranes are replaced at 2.5 years). Suggestion: Total number of MBR membranes installed: X; Total number of MBR membranes requiring replacement under warranty OR requiring replacement at less than 10 years of service regardless of warranty status: Y. A maximum allowable percentage will be determined and if the number replaced versus the number installed exceeds the allowable percentile the bidder will be deemed not meeting the required specification.

Response: Addressed in the attached, "Addendum No. 3 to the Contract Documents for the procurement of the Membrane Equipment System for the San Luis Obispo Water Resource Recovery Facility, dated August 3, 2017."

7. **Question:** Schedule K, part 2 does not provide a description on how the information will be utilized in the bid process. Is it simply a pass-fail criteria or will it be used to determine some sort of minimum qualification? If the information was complete, but then was used to disqualify a vendor it may not be a legally defensible position. Suggestion: Include the above but also add a requirement to list the total number and total installed capacity of facilities that have been in service more than 7 years without needing more than 5% of their membranes replaced for any reason. We recommend that the City staff and agents use this data to determine what is in the best interest of the City and which product provides the best value to the City. (i.e. 232 MBR plants with a combined capacity of 560MGD have been in service for 7 or more years without requiring membrane replacement).

Response: Addressed in the attached, "Addendum No. 3 to the Contract Documents for the procurement of the Membrane Equipment System for the San Luis Obispo Water Resource Recovery Facility, dated August 3, 2017."

8. **Question:** 00 41 63 Supplement 1 Schedule “K” 1. A. currently requires:

“Data shall be provided in the form of plots of each specified parameter as a function of calendar time for each membrane train from the beginning of train operation until date of proposal.”

Please consider changing this requirement for data “until date of proposal” to something more reasonable to prepare our final proposal, such as until June 15, 2017 or June 30, 2017.

Response: Addressed in the attached, “Addendum No. 3 to the Contract Documents for the procurement of the Membrane Equipment System for the San Luis Obispo Water Resource Recovery Facility, dated August 3, 2017.”

Contractors are required to base their proposal on the plans, specifications and any issued addenda. To do otherwise shall be at the Contractor’s own risk.

Contractors shall note the acknowledgment of this addendum in the appropriate space provided on the Proposal Form.

If you have any questions contact Jennifer Phillips at Jennifer.Phillips16@ch2m.com.